

OKIPAGE *10ex, 12i/n*



User's Guide

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Safety Instructions

Your Oki printer has been carefully designed to give you years of safe, reliable performance. As with all electrical equipment, however, there are a few basic precautions you should take to avoid hurting yourself or damaging the printer:

- Read the setup instructions in this handbook carefully. Be sure to save it for future reference.
- Read and follow all warning and instruction labels on the printer itself.
- Unplug the printer before you clean it. Use only a damp cloth; do not use liquid or aerosol cleaners.
- Place your printer on a firm, solid surface. If you put it on something unsteady, it may fall and be damaged; if you place it on a soft surface, such as a rug, sofa, or bed, the vents may become blocked, causing the printer to overheat.
- To protect your printer from overheating, make sure all openings on the printer are not blocked. Do not put the printer on or near a heat source, such as a radiator or heat register. Keep it out of direct sunlight. Allow enough room around the printer for adequate ventilation and easy access to the paper trays.
- Do not use your printer near water, or spill liquid of any kind into it.
- Be certain that your power source matches the rating listed on the back of the printer. If you are not sure, check with your dealer or with your local power company.
- Your printer has an earthed, 3-pin plug as a safety feature, and it will only fit into an earthed outlet. If you can not plug it in, chances are you have an older, non-earthed outlet; contact an electrician to have the outlet replaced. Do not use an adapter to defeat the earthing.
- To avoid damaging the power cord, do not put anything on it or place it where it will be walked on. If the cord becomes damaged or frayed, replace it immediately.
- If you are using an extension cord or power strip with the printer, make sure that the total of the amperes required by all the equipment on the extension is less than the extension's rating. The total ratings of all equipment plugged into the outlet should not exceed 15 amperes.
- The power outlet into which you plug your printer must remain accessible at all times.
- Lifting the top cover exposes hot surfaces. These are clearly labelled. Do NOT touch them.
- Do not insert anything into the ventilation slots on the printer; you could get a shock or cause a fire.

- Aside from the routine maintenance described in this handbook, do not try to service the printer yourself; opening the cover may expose you to shocks or other hazards.
- Do not make any adjustments other than those outlined in the handbook you may cause damage requiring extensive repair work.
- It is recommended that the printer be switched off prior to opening or removing covers.

If anything happens that indicates that your printer is not working properly or has been damaged, unplug it immediately and contact your dealer.

These are some of the things to look for:

- The power cable or plug is frayed or damaged.
- Liquid has been spilled into the printer, or it has been exposed to water.
- The printer has been dropped, or the cabinet is damaged.
- The printer does not function normally when you are following the operating instructions.

Important Wiring Instructions

The wires in the power cable are coloured in accordance with the following code:

Green and Yellow	—	Earth 
Blue	—	Neutral
Brown	—	Live

If the colours of the wires in the power cable of this printer do not correspond with the markings of the terminals of your plug, proceed as follows:

- Green and Yellow must be connected to the terminal marked with the letter **E** (or the safety earth symbol) or the terminal coloured Green or Green & Yellow.
- Brown must be connected to the terminal marked with the letter **L** or coloured Red.
- Blue must be connected to the terminal marked with the letter **N** or coloured Blue or Black.



This printer must be earthed.

If you are in any doubt regarding the wiring, please contact a qualified electrician.

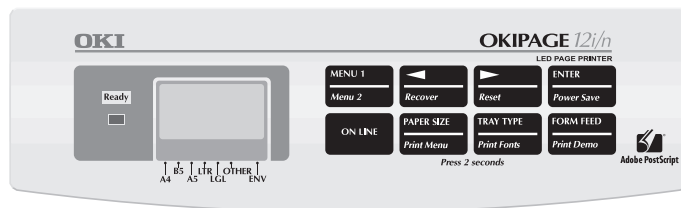


This product complies with the requirements of the Council Directives 89/336/EEC and 73/23/EEC on the approximation of the laws of the member states relating to electromagnetic compatibility and low voltage.

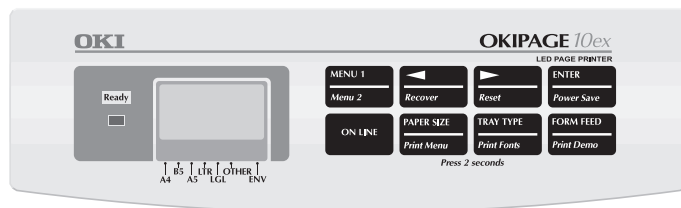
As an ENERGY STAR Partner, Oki has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

Printer Control Panel

OKIPAGE 12i/n



OKIPAGE 10ex



The Ready Light

- ON** Printer is on-line ready to receive data.
- OFF** Printer is off-line, cannot receive data. All button functions are now active.
- BLINKING** Printer is receiving data.

The Display Window

Indicates the following:

- What the printer is doing during normal operation.
- When you need to add paper or change consumables.
- When there is something wrong with the printer.

Printer Buttons

These allow the user to access, view and change printer settings. Quick menus are also available from the panel to allow rapid access to more frequently used functions.

Button Functions

To access the primary function on a button, press momentarily and release. To gain access to the secondary function, press and hold the button for at least two seconds.

MENU 1/Menu 2

When printer is off-line:
press to access printer menu 1.
press and hold to access printer menu 2.

◀/Recover

When in printer menu mode:
press to reverse through items in a menu category.

When printer is offline:
press and hold to resume printing after an error condition (if possible, depending on nature of error).

▷/Reset

When in printer menu mode:
press to advance through items in a menu category.

When printer is offline:
press and hold to reset the printer.

ENTER/Power Save

When in printer menu mode:
press to make current setting active. An asterisk (*) will appear in the display.

When printer is offline:
press and hold to enter power save menu.

ON LINE

When printer is off-line:
switches printer to on-line.

When printer is on-line:
switches printer to off-line.

When in menu mode:
press to end Menu session.

PAPER SIZE/Print Menu

When the printer is off-line:
press to enter the Paper Size Quick Menu.
press and hold to print the current Menu Settings. When the display shows **MENU HP PCL6**, press **ENTER**.

TRAY TYPE/Print Fonts

When the printer is off-line:
press to enter the Tray Type Quick Menu.
press and hold to print a sample of all the resident, card and soft fonts present. When the display shows **FONTS HP PCL6**, press **ENTER**.

FORM FEED/Print Demo

Press to print all the remaining data in the printer buffer and eject the page.

When the printer is off-line:
press and hold to print the Demo page. When the display shows **DEMO HP PCL6**, press **ENTER**.

Printer Menus

It is possible, using the front panel buttons, to change the default configuration of your printer to accommodate your software application, specific paper size, method of paper feed and interface connection.

The menu structure consists of three levels:

Category

Each category consists of several items, selected by pressing the **MENU 1/Menu 2** button (with the printer off-line). When the required category is displayed press the **ENTER** button to display a list of items.

Item

Each item consists of several parameters displayed on the upper line in the message window by pressing the **MENU 1/Menu 2** button.

Parameter

The parameter will be displayed on the lower line of the message window by pressing the left & right buttons. When the required parameter is displayed press the **ENTER** button.



If your software can control a feature that is also controlled in the printer menu, the software will override the menu setting. Use your software to control printer features whenever possible.

Viewing and Modifying Menu Settings

Two menus are available:

1. Press **ON LINE** to place the printer off-line.
2. Enter Menu 1 or Menu 2 as required.
Menu 1 is selected by momentarily pressing and releasing the **MENU 1/Menu 2** button.
Menu 2 is selected by holding down the **MENU 1/Menu 2** button for at least two seconds.
3. Once the first menu category is displayed, further presses of the **MENU 1/Menu 2** button move on to the next category.
4. To enter a category and display an item, press the **ENTER** button. The display will show the item in the top line and the current parameter in the bottom line.
5. The current active parameter is indicated with an asterisk*. To alter the parameter, press the **< >** buttons. To make a new parameter active, press the **ENTER** button when that parameter is displayed.
6. To move on to a new item or category, press the **MENU 1/Menu 2** button. To exit the menu, press the **ON LINE** button.

The following tables list printer menu selections. Factory default settings are indicated in bold type.

Level 1 Menu

Category	Items	Parameters
PERSONALITY	EMULATE	AUTO , HP PCL 6, EPSONFX, IBM PPR, ADOBE PS (OKIPAGE 12/n)
TRAY SELECT	MANUAL PAPER IN AUTO TRAY (if Tray 2 is installed)	OFF , ON TRAY 1 , TRAY 2 (if installed), FEEDER (if installed) OFF , ON
EDIT SIZE	EDT SIZE	CASSETT , LETTER, EXEC, LEGAL14, LEGAL13, A4 SIZE, A5 SIZE, A6 SIZE, B5 SIZE, COM-9, COM-10, MONARCH, DL ENV, C5 ENV
PAPER SIZE	TRAY 1	A4 SIZE , A5 SIZE, A6 SIZE, B5 SIZE, LETTER, EXEC, LEGAL14, LEGAL13
	MANUAL	A4 SIZE , A5 SIZE, A6 SIZE, B5 SIZE, COM-9, COM-10, MONARCH, DL ENV, C5 ENV, LETTER, EXEC, LEGAL14, LEGAL13
	TRAY 2 (appears if installed)	A4 SIZE , A5 SIZE, A6 SIZE, B5 SIZE, LETTER, EXEC, LEGAL14, LEGAL13
	FEEDER (appears if installed)	A4 SIZE, A5 SIZE, A6 SIZE, B5 SIZE, COM-9, COM-10, MONARCH, DL ENV , C5 ENV, LETTER, EXEC, LEGAL14, LEGAL13
MEDIA TYPE	TRAY1/TRAY 2 (if installed)	MEDIUM , M HEAVY, HEAVY, LIGHT, M LIGHT
	FEEDER (if installed)	MEDIUM , M HEAVY, HEAVY, LIGHT, M LIGHT
	MANUAL	MEDIUM , M HEAVY, TRANSPR, HEAVY, LIGHT, M LIGHT

Category	Items	Parameters
PAPER SIZE CHK	SIZE CHK	ENABLE , DISABLE
COPIES	COPIES	1 to 999
FONTS & SYMBOLS	FONT SRC	RESIDENT , CARD (appears if installed)
	DLLSOFT (appears if loaded)	
	FONT NO.	I000 to I048
	FONT CPI (appears if selected font is scalable/fixed spaced)	10.00 , 0.44 to 99.99
	FONT HGT (appears if selected font is scalable proportional spaced)	12.00 , 4.00 to 999.75
	SYMBOL	PC-8 , (89 symbol sets are available)
PAGE LAYOUT 1	A4 WIDTH BLNKSKIP CR FUNCTION LF FUNCTION	78 COL , 80 COL OFF , ON CR , CR+LF LF , LF+CR
PAGE LAYOUT 2	ORIENT LINES/PG	PORTRT , LANDSCP 64 LNS , 5 to 128 LNS
HOST I/F (OKIPAGE 12i/n)	PARALL NETWORK	ENABLE , DISABLE ENABLE , DISABLE

Level 2 Menu

Category	Items	Parameters
PRINT MODE	MODE (resolution)	600 , V1200 (600 × 1200 dpi), 300
AUTO OPERATION	AUTOCONT	OFF , ON
	WAIT TIME	OKIPAGE 10ex: OFF , ON, 5 secs, 6 secs....300 secs OKIPAGE 12i/n: OFF, ON, 5 secs, 6 secs... 90 secs ...300 secs
	MAN TIME	60 secs , OFF, 30 secs
	PR PROTEK	GOOD , BETTER, BEST
DARKNESS CONTROL	DARKNESS	0 , +1, +2, -2, -1
POWER SAVING	POWER SAVING	0 SEC , 8 MIN, DISABLE
LOW TONER	LOW TNR	ON , OFF
TONER SAVING	TONER	DISABLE , MEDIUM, LIGHT
CLEARABLE WARNINGS	CLR WRNG	ON , JOB
ERROR REPORT	ERREPORT	OFF , ON
PARALLEL I/F	SPEED BI-DIRCT I-PRIME	HIGH , MEDIUM ENABLE , DISABLE OFF , ON

Category	Items	Parameters
NETWORK (OKIPAGE 12i/n)	FRAME TCP/IP DHCP RARP IP BYTE 1 IP BYTE 2 IP BYTE 3 IP BYTE 4 SM BYTE 1 SM BYTE 2 SM BYTE 3 SM BYTE 4 GW BYTE 1 GW BYTE 2 GW BYTE 3 GW BYTE 4 NETWARE ETHERTALK NET MNT SELF TEST	AUTO , 802.2, 802.3, SNAP, ETHER2 ENABLE , DISABLE OFF , ON OFF , ON 193 , 0-255 132 , 0-255 3 , 0-255 99 , 0-255 255 , 0-255 255 , 0-255 255 , 0-255 0 , 0-255 192 , 0-255 168 , 0-255 99 , 0-255 254 , 0-255 ENABLE , DISABLE ENABLE , DISABLE STATUS - STATUS18 OK, NG
LANGUAGE	LANGUAGE	ENGLISH , DEUTSCH, FRANCIS, ITALIAN, CASTLAN, SVENSKA, NORSE, DANSK, NEDERL, TÜRKCE, PORTUG, POLSKI

Paper

Choosing Paper

- For best results, use paper that is smooth and of high quality, like copier type paper or paper with a Sheffield rating of 100-250.
- Store paper in its ream wrapper until you are ready to use it. Keep it away from moisture or other conditions that can cause it to wrinkle or curl.
- Preprinted forms must not scorch, melt, offset, or release hazardous emissions when heated to 392° F (200° C) for 0.1 second.
- Avoid printing on both sides of the paper or on preprinted documents that have been in a photocopier.
- Try paper before you buy it in quantity.

Transparencies/Adhesive Labels

- Always use Manual Feed
- Always use rear output.
- Media must be specifically made for laser printers or photocopiers.
- Must be able to withstand 200°C for 0.1 sec.
- Labels should cover entire carrier sheet.
- Carrier sheet or adhesive **must not** be exposed to any part of the printer.

Paper Sizes

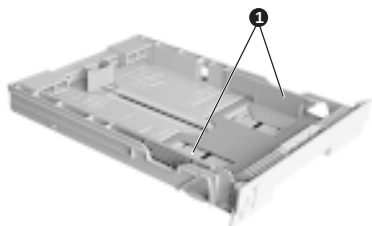
LETTER	COM-9*
EXEC	COM-10*
LEGAL 14	MONARCH*
LEGAL 13	DL ENV*
A4	C5 ENV*
A5	
A6	(*manual feed only)
B5	

Paper Weight

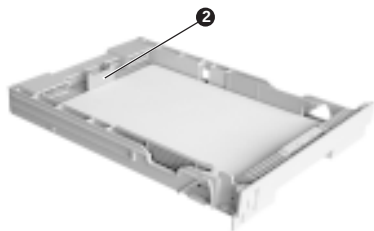
Paper Tray:	16 - 24 lb (60 - 90g/m ²)
Manual Feed:	16 - 32 lb (60 - 120g/m ²)

Installing Paper

1. Remove the paper tray from the bottom of the printer and place plain paper in the tray, carefully keeping the level of the paper in the tray below the guide marks (1).
3. Adjust the paper guides (1).



2. Adjust the rear paper support (2) to the size of paper you are using by lifting up and sliding forwards or backwards as necessary.



4. Replace the tray in the printer. The paper level indicator (3) provides a visual indication of how much paper is left in the tray.



Printing Envelopes

1. Pull out the rear exit extender until it locks and lift out the support bar. Pull down the manual feed tray and adjust the paper guides.
2. Insert the envelope, flap down and to the left, until the printer grips it.
3. Set envelope size and landscape orientation in your software, then issue the print command.

Choosing Envelopes

- Always use rear output.
- No windows or metal clasps.
- Media no heavier than 28 lbs.
- Smooth even surface.
- No self-sealing flaps.
- Seams down the sides, not across the middle.
- Squared-off flaps that do not cover the print area.

Printing Transparencies

Select and print transparencies using the **MANUAL FEED** option under **MEDIA TYPE** in **MENU 1**. Select **TRANSPR** to ensure the correct fusing temperature is set. Damage may occur to your transparencies if an incorrect setting is used.

Feeding Heavyweight Paper or Cardstock

The normal paper path from a main paper tray to the top output stack involves two complete U-turns. This may sometimes cause very heavyweight paper or cardstock to jam or misfeed.



Use the front tray to feed this type of paper and the rear paper exit to collect your printed output. This gives a nearly straight paper path through the machine, and may prove more reliable in this type of application.

Print Quality Adjustments for Different Paper

The process used to fuse (fix) the printed image to the paper involves a mixture of pressure and heat. Too much heat will cause lightweight paper to crease or curl, while too little heat will cause the image not to fuse fully into heavyweight paper.

Use the **MEDIA TYPE** setting in **MENU 1** to adjust for different thicknesses of paper.

Toner

When to Replace the Toner Cartridge

Replace the toner cartridge after **TONER LOW** displays in the printer control panel window. After **TONER LOW** displays, the printer will print about 100 more pages, then display **TONER EMPTY** and stop printing. Printing will resume after a new toner cartridge has been installed.



The use of OKI toner is highly recommended. Using compatible or counterfeit toners can seriously damage your printer.

Toner Cartridge Life

How long your toner cartridge lasts depends on the print density; the percentage of the page that prints black. A typical letter has 3% to 5% print density; graphics usually have higher density. Higher print density means toner is used up faster.

At 5% print density, a toner cartridge will print an average of 2,000 pages. Remember, this is only an average: actual results may vary.

The first toner cartridge in your new printer has to fill the drum reservoir and saturate the developing roller with toner. It normally produces about 1,000 pages.

Replacing the Toner Cartridge



Do NOT remove cartridge from packaging.

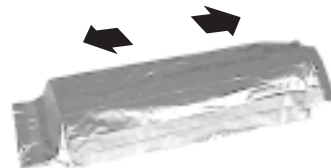


Use OKI Type 5 image drum and toner cartridges only.

1. Open the cover and remove the used toner cartridge.



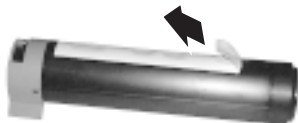
2. Shake the toner cartridge to evenly distribute toner.



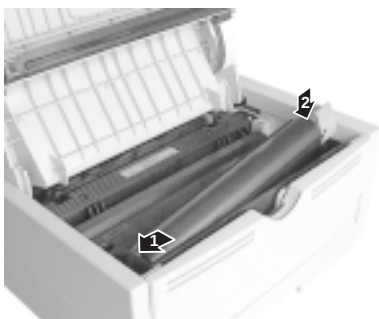
3. Unwrap the new cartridge.



4. Remove the tape.



5. Insert the cartridge into the printer, left end first as illustrated.



6. Push the coloured tab forward to release the toner into the toner hopper.



7. Close the printer cover.



Image Drum

When to Replace the Image Drum Cartridge

When the drum reaches 90% of its life, the **CHG DRUM** message will display in the printer control panel window. Change the image drum cartridge when the print becomes faint or begins to deteriorate. Ideally you should keep a new cartridge on hand.

Image Drum Cartridge Life

The life of an image drum depends on a number of factors, including temperature and humidity, the type of paper you use, and the number of pages per job.

The image drum cartridge should last about 9,000 pages at one page per job, 14,000 pages at three pages per job and 20,000 pages at fifteen pages per job. These numbers are approximate, since you do not print the same number of pages each time, and environmental conditions and paper type used may vary.

Replacing the Image Drum Cartridge

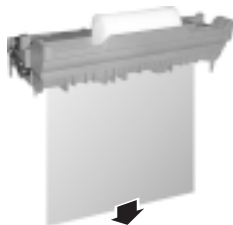
The image drum is fragile. To avoid damage to the new drum, take these precautions while handling the new image drum cartridge:

- Do not touch the green drum surface.
- Do not set the cartridge down on anything that might scratch the surface of the drum.
- Do not expose the drum to direct sunlight and do not expose it to room light for more than 5 minutes. Leave it in the package until you are ready to install it into the printer.

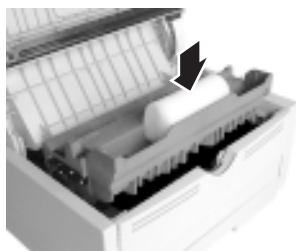
1. Open the cover and remove the used image drum cartridge.



2. Remove the new image drum from the package.
3. Remove the protective paper.



4. Install the new image drum cartridge into the printer placing the alignment pins on each end into the slots in the printer.



5. Remove the shipping insert from the toner well and discard. Reset the drum counter (see below), and install a new toner cartridge following the instructions in the previous section.

Resetting the Drum Counter

After replacing the image drum cartridge, reset the drum counter to keep a correct count of the number of pages printed on the image drum.

1. Turn the printer on while holding the **MENU 1/Menu 2** button. **USERMNT** displays in the control panel window.
2. Press **MENU 1/Menu 2** three times. **DRUM CNT RESET** displays.
3. Press **ENTER**. The counter will reset and the printer will go **ON-LINE**.

Fonts

What Is a Font?

Strictly speaking, a font refers to a set of printable characters in a particular typeface of a specific size (e.g. 12 point) and style (e.g. roman, bold or bold-italic). In computer printing, however, this term has been used in a wider context to refer to all sizes and styles of a particular typeface. In printers, fonts may be divided into two basic types: bitmap fonts and scalable (or outline) fonts.

Bitmap fonts are made up of a pattern of dots (at the printer resolution) to form the image of each printable character. These are of a fixed size, and scaling makes them look ragged.

Scalable fonts are stored as a set of mathematical curves. At print time the printer uses the stored curves to make up a bitmap of each character required, at the required size, and in the required style, at the full printer resolution. Such fonts are therefore said to be scalable, and do not appear ragged at enlarged sizes.

Printing a Font List

1. Press the **ON-LINE** button to take the printer off line.
2. Press the **TRAY TYPE/Print Fonts** button for at least two seconds. The display shows **FONTS HP PCL6**.
3. Press the **ENTER** button.
4. After a short delay two pages of font information will be printed, including samples.

Using Fonts

Some MS-DOS and most Windows programs provide an easy method of font selection within documents. In these cases the printer's font selection is controlled by the host PC software application (or by Windows itself). On other software platforms special codes (escape sequences) must be embedded with the print data. This topic is beyond the scope of this Help Guide. However, the font list referred to in the previous topic contains a list of the required codes. Use of these codes is best left to a professional programmer.

Symbol Sets

Your printer provides special sets of characters for technical, legal and foreign language uses, as well as sets of drawing characters and standard alphanumeric characters. Each font uses symbols from one or more of these sets.

Status Messages

This section contains explanations of the different messages you will see, displayed on one, or both lines in the LCD window of your printer.

Ready Light Status

	ON
	OFF
	BLINK
	UNDEFINED

Control Panel Messages

ttttt = TRAY1, FEEDER, TRAY2 (option).

TRAY1 = upper tray

TRAY2 = lower tray

FEEDER = multi media feeder

» Indicates that the second line is a scrolling display.

Message	Status
Ready  ON-LINE XXX	Indicates the printer is in ON LINE mode. XXX = HP PCL6, FX, PPR, WIN, AUTO.
Ready  OFF-LINE	Indicates the printer is in OFF-LINE mode.
Ready  PROCSSING XXX	Indicates that the printer is receiving data.
Ready  DATA XXX	Indicates that there is data in the printer buffer.
Ready  PRINTING	Printer is printing.
Ready  NO PS	Indicates that the PJP command has selected a printer language that is not installed in the printer.
Ready  PWR SAVE	Indicates that the printer is operating in power saving mode.
Ready  TONERLOW	Indicates the amount of toner left in the toner cartridge is low. Print quality may be affected.

Message	Status
Ready ☒ TONERSNS	Toner sensor error.
Ready ☒ CHG DRUM	Indicates that the printer has reached the end of its life (image drum). Print quality may be affected
Ready ☒ PRINTING nnn/mm	Indicates that copy pages are being printed. nnn = current page. mmm = total pages.
Ready ☐ RESET	The printer clears the remaining data in its buffer and resets the menu to user default settings. Temporary DLL/Macro data is also cleared.
Ready ☒ PRINT FONTS	The printer will print all the available fonts. Ready ON – initiated by software command. Ready BLINK – initiated by button.
Ready ☒ PRINT CLEANING	Indicates that the printer is cleaning.
Ready ☒ PRINT DEMO	The printer will print a demo page. Ready ON – Initiated by software command. Ready BLINK – Initiated by button.

Message	Status
Ready ☒ PRINT MENU	The printer will print current menu settings. Ready ON – Initiated by software command. Ready BLINK – Initiated by button.
Ready ☒ MANUAL #REQUEST	The printer is asking you to insert requested size paper. # = Paper Size.
Ready ☐ CLEANING MANUAL #	The printer is requesting # size paper to be inserted for cleaning process.
Ready ☐ ttttt PAPEROUT	Indicates that the paper tray is empty.
Ready ☐ COVER T2 OPEN	Indicates that the cover to tray 2 is open.
Ready ☐ ttttt mmm» PAPER» REQUEST	A request for paper of size mmm. ttttt = TRAY1, FEEDER, TRAY2 (option).

Message	Status	Message	Status
Ready ☐ MEMORY OVERFLOW	Memory has overflowed for one of the following reasons. • Too much data on page. • Too much macro data. • Too much DLL data. Press RECOVER to continue. Install extra memory or reduce data on page.	Ready ☐ TONER EMP	Indicates that TONER LOW has been exceeded and the cartridge should be replaced.
Ready ☐ REC BUF OVERFLOW	The receive buffer memory has overflowed. Press RECOVER to continue. The PC ignores printer busy signal in the interface, check cable pin assignments.	Ready ☐ tttttt SIZE ERR	Wrong paper size found. Open and close printer cover to continue. Check paper size or paper double feed.
Ready ☐ PRINT OVERRUN	Print processing speed could not follow the paper feed speed. Press RECOVER to continue. Simplify page formatting data or select Page Protection menu.	Ready ☐ tttttt INPUTJAM	Paper jam found, when fed from paper tray. Check paper in the tray. Open and close printer cover to continue.
Ready ☐ HOST I/F ERROR	Indicates an error in the network or RS232C interface. Check protocols of printer and host. Press RECOVER to continue.	Ready ☐ tttttt FEED JAM	Paper jam found, during paper feed. Remove misfed paper and close printer cover to continue.
		Ready ☐ tttttt EXIT JAM	Paper jam found in paper exit area. Open printer cover, remove paper, close printer cover to continue.
		Ready ☐ MENU	Settings Menu.

Message	Status
Ready  COVER OPEN	Cover is open. Press down firmly to close.
Ready  EEPROM RESETTING	EEPROM ID check error. Press RECOVER to reset EEPROM to factory default.
Ready  ERROR nn	Abnormality found in the printer. Switch printer off then on again to clear, if problem persists, contact service representative.
Ready  ERROR 0n aaaaaaaa	Abnormality found in the controller. Switch printer off then on again to clear, if problem persists, contact service representative. aaaaaaaa = error address
Ready  SIMM-ROM ERROR	Flash SIMM sum check error.
Ready  	Displayed in window for one second after switching on power, for test purposes.
Ready  INITIAL- IZING	Printer is in initialization mode after switching on, prior to on-line mode.
Ready  RESET TO SAVE	Printer is requesting RESET button to be pressed for more than 2 seconds, to write new menu data to EEPROM.

Printer Maintenance

Maintenance Menu

This menu includes printer maintenance and operating functions. To enter the Maintenance Menu:

1. Turn off the printer.
2. Press and hold **MENU 1/Menu 2** and turn the printer on. **USER MNT** displays.
3. Press **MENU 1/Menu 2** repeatedly to advance to the category you want.
4. Press **ENTER** to invoke a function; or press $\triangleright$ to see other options, then press **ENTER** to select the option you want. Press **ON LINE** to exit.

MENU RESET	Reset Level 1 menu to factory settings.
HEX DUMP	Print a hexadecimal dump of received data for diagnostics. To exit, turn off the printer.
DRUM CNT RESET	Reset the drum counter after replacing the image drum cartridge.
OP MENU	DISABLE = Disables all control panel buttons except ON LINE . ENABLE = All buttons are active.
REC BUFF	Auto, 8KB, 20KB, 50KB, 100KB. (Default = Auto.)
X ADJUST	Adjust horizontal print position in 0.25 mm increments. Plus (+) indicates right movement, minus (-) indicates left movement.
Y ADJUST	Adjust vertical print position in 0.25 mm increments. Plus (+) indicated downward movement, minus (-) indicates upward movement.
2ND TRAY	1...16. (2nd paper tray address. Default = 5.)

Generating a Cleaning Page

If your printer shows signs of fading, streaking or erratic marks, you may be able to clear the problem by generating a drum cleaning page as follows:

1. Press the **ON-LINE** button to take the printer off line.
2. Hold down the $\triangleleft \triangleright$ buttons together for at least two seconds.

The display will show **CLEANING** and **MANUAL A4 SIZE REQUEST**.

3. Carefully pull the tab (1) until the panel is in the fully lowered position.



4. Insert a sheet of A4 plain paper into the manual feed tray.



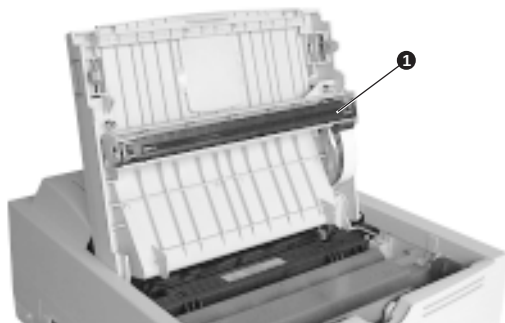
5. The display will show **PRINT CLEANING** as the paper is fed. The paper will emerge from the printer with grey shading. This sheet may be discarded.
6. Return the printer on line by pressing the **ON LINE** button.

If subsequent printing appears faded or uneven, try replacing the toner cartridge.

Cleaning the LED Array

Clean the LED array

- whenever you install a new toner cartridge.
- if you see faded vertical areas or light printing down a page.



Wipe the LED array (1) gently with the cleaning pad that came with your toner cartridge. You can also use a clean, soft cloth with a small amount of rubbing alcohol on it.

Basic Trouble Shooting

Paper Jams

Your printer may experience a paper jam in one of three areas. The display message will indicate which area has caused the jam:

INPUT JAM	Paper has failed to leave the selected tray and enter the printer's internal paper path.
FEED JAM	Paper has entered the printer but failed to reach the exit.
EXIT JAM	Paper has reached the exit but has failed to exit completely from the printer.

Input Jam from Cassette Tray

1. Remove the paper tray (1) from the printer.
2. Remove any crumpled or folded paper.



3. Remove any paper from the underside (2) of the printer.
4. Replace the paper tray. After successfully removing any damaged or misfed paper the printer should continue printing.

Feed Jam or Exit Jam

1. Remove the tray and clear any mis-fed sheets, as described in the previous example.
2. Open the cover.



**The fuser area will be hot. This area is clearly marked.
Do not touch it.**

3. Carefully lift out the image drum unit, complete with the toner cartridge. Be careful not to touch or scratch the green drum surface.



4. Remove any jammed sheets from the paper path.
5. Re-install the image drum cartridge, ensuring that it correctly locates into the slots on each side of the printer.



6. Close the top cover and press down to latch it closed.

The printer will warm up and commence printing when ready. The page lost through the jam will normally be reprinted.

Print Quality Problems

Before consulting a service representative regarding a print quality problem, check the table below to see if there is a solution, or something you might have overlooked.

Symptom	Problem	Solution
Blank sheets printed.	Image drum cartridge not properly installed.	Reinstall image drum cartridge.
	Empty or missing toner cartridge.	Install new toner cartridge.
Entire page prints faintly.	Empty toner cartridge. Pages get fainter when toner is used up.	Install new toner cartridge.
	LED array is dirty.	Clean LED array.
Page has grey background.	Static electricity, generally from dry environments, causes toner to stick to background.	Change papers to a smoother laser bond or use a humidifier.
Page prints all black.	Hardware problem.	Contact your service representative.
Page has repetitive marks.	Damaged image drum cartridge causes repetitive marks every 1.6 inches (4.06 cm) due to surface nicks and scratches.	Generate a Cleaning Page, repetitive marks may be temporary.

Symptom	Problem	Solution
Oblong area of faint print appears on each page.	Dropout caused by using paper exposed to high humidity.	Change paper stocks, check paper storage environment or use a dehumidifier; check toner level.
Vertical white streaking or faint areas on page.	Toner is low and does not distribute properly, or the drum is worn out.	Replace toner cartridge. Check drum and replace the drum, if necessary. Contact service.
	LED array is dirty.	Clean LED array.
Vertical black lines.	Hardware problem.	Contact service.
Fuzzy print.	LED array is dirty.	Clean LED array.
Distorted print.	Paper path, lamp assembly, or fusing unit problem.	Generate Cleaning Page.
		Contact service.
Faded print.	Toner cartridge is not correctly installed.	Install toner cartridge correctly.
Smeared or blotched print.	Dirty rollers; toner dropped inside printer or image drum problem.	Contact service.

Symptom	Problem	Solution
Printed page is light/blurred.	Is toner low?	Replace toner cartridge.
	Is paper meant for laser printers?	Use recommended paper.
	LED array is dirty.	Clean LED array.
Bold characters and dark lines are smeared.	Toner is low.	Install new toner cartridge.
Print is darker than usual.	Darkness setting is too high.	Change darkness setting.
Pages curl excessively.	Printing on wrong side of paper.	Turn paper over in tray. (Note arrow on paper package). Install paper print side down in tray.
	Moisture in paper. Improper storage.	Avoid storing paper in areas of excessive temperature and humidity. Store paper in protective wrapping.
	High humidity.	Recommended operating humidity: 20-80%

Software Problems

Your software (operating environment, applications and printer drivers) controls the printing process. Make sure you have selected the right driver for use with your printer. See your software documentation for more information.

Symptom	Problem	Solution
Printing is "garbled".	Incorrect driver is installed.	Install an appropriate driver.
Printer's output is below rated speed.	Much of the printing delays will be caused by your application. Sometimes purely text documents will print slowly depending on the selected fonts and how they are transferred to the printer.	For maximum speed, use text in your document and use a printer resident font.
Size of top margin increases with each page printed.	"Creeping text." Number of lines per page in software is not equal to number of lines per page of printer.	Many software packages assume 66 lines per page, but your printer's default is 64. Adjust software accordingly, or set LINES Per PAGE in the soft control panel to equal lines per page in your software.

Hardware Problems

Symptom	Problem	Solution
Graphic image prints partly on one page, partly on the next.	Insufficient printer memory for this image at this resolution.	Change the resolution, reduce the image size, or install more memory in your printer.
When you try to print nothing happens, but printer indicates it is ready to receive data.	Configuration error.	Check cable connection. If more than one printer is available, make sure your printer has been selected.
"Garbage" prints.	Incorrect cable configuration. (Also, see "Software Problems.")	Check cable configuration, continuity, and length.
Printer freezes or displays error message when computer is rebooted.	Booting the computer while the printer is on can cause a communications error.	Turn printer off before rebooting computer.
Odours.	Gases are given off by forms or adhesives passing through the hot fusing unit.	Make sure the forms you use can withstand heating, and provide adequate ventilation.
Printer is on but must "warm up" before a job is printed.	Power Save mode is set on to conserve energy. The fuser must heat up before you can begin printing the next job.	To eliminate warm up delay, change Power Save setting in the soft control panel.

Specifications

Printing Process: LED array imaging to organic photoconductive drum.

Power Supply:

Voltage: 230V+6%,-14% — 240V ±10% AC
Frequency: 50/60Hz ±2%
Power Cable: 1.8m separate cable, terminated with country specific plug.

Physical:

Dimensions: 200 × 330 × 377mm (H × W × D)
Weight: 10 kg with legal/universal cassette installed.

Resolution:

LED Head: 600dpi
Max. Input: 600×1200dpi
Output: 600×1200dpi

Power Consumption:

Power Save: 18 W
Idle: 61 W
Normal: 215 W
Peak: 460 W

Memory:	OKIPAGE 10ex	OKIPAGE 12i/n
RAM (fitted):	2MB	4MB
RAM (max.):	35MB	36MB
ROM:	6MB	6MB

Emulation: HPLJ6p PCL6, IBM Proprinter, Epson, PostScript 2 (OKIPAGE 12i/n)

Paper Handling:

1st tray (fitted): 250 sheets
2nd tray (opt.): 500 sheets
Paper weight: 1st/2nd/multi trays: 60–105g/m²
manual: 60–120g/m²
Output: 150 sheets face down, 50 sheets face-up (rear output)

Product life:

Duty: 180 KP, 5 years, maximum of 15KPPM (12i/n)
180 KP, 5 years, maximum of 6KPPM (10ex)
Reliability: MTBF; 5,700 PH, MTTR; 20 minutes
Consumables: Fuser; 180KP, Transfer roller; 180KP, Image drum; 20KP (continuous), Toner; 2KP @ 5% density

Environment:	Operating	Non-operating	Storage	Transit
			(1 month)	(1 month)
Temperature:	10–32°C	0–43°C	-20–50°C	-29–50°C
Humidity:	20–80%	10–90%	10–90%	10–90%
Noise:	Operating:	48dBA		
	Standby:	38dBA		
	Power Save:	below measurable limit		

Interface: IBM Centronics (CEN 36), RS232C (option), 10BaseT (OKIPAGE 12i/n)

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